

In the Claims:

Please amend Claims 16, 18, 27, 41, 44, 47, 50 and 61 as follows:

OK 16. (Amended) A method of processing a signal representing a first field and a second field, wherein the first field is coded according to a code selected from a set of codes and the second field indicates the code applied to the first field, the method comprising the steps of:

receiving the signal at a first station;

processing the received signal to generate an estimate of the second field;

B1 identifying the code applied to the first field based on a selected one of the generated estimate of the second field or a combination of the generated estimate of the second field and respective likelihood metrics associated with decoding the received signal according to respective codes of the set of codes, wherein selection is based on a confidence in the generated estimate of the second field, and wherein said step of identifying the code applied to the first field comprises the steps of:

decoding the received signal according to respective codes of the set of codes, wherein said step of decoding the received signal according to respective codes of the set of codes to an extent that is determined based on prior communication comprises the step of decoding the received signal according to respective codes of the set of codes to an extent that is determined based on at least one of a measure of channel quality, a communications status report transmitted between the first station and a second station that transmitted the signal, an error indication, an error rate estimate, a state of a communications transaction between the first station and the second station, and an extent to which a previously received signal was decoded; and

generating respective likelihood metrics for the respective decodings of the received signal according to the respective codes of the set of codes; and

decoding the received signal according to the identified code to produce an estimate of the first field.

OK 18. (Amended) A method of processing a signal representing a first field and a second field, wherein the first field is coded according to a code selected from a set of codes and the second field indicates the code applied to the first field, the method comprising the steps of:

receiving the signal at a first station;

processing the received signal to generate an estimate of the second field;

B2 identifying the code applied to the first field based on a selected one of the generated estimate of the second field or a combination of the generated estimate of the second field and respective likelihood metrics associated with decoding the received signal according to respective codes of the set of codes, wherein selection is based on a confidence in the generated estimate of the second field, wherein said step of identifying the code applied to the first field comprises the step of biasing a selection of a code from the set of codes based on prior communication between the first station and a second station that transmitted the signal that occurred prior to reception of the signal at the first station, and wherein said step of biasing a selection of a code from the set of codes comprises the step of biasing the selection of a code from the set of codes based on at least one of a measure of channel quality, a communications status report transmitted between the first station and a second station that transmitted the signal, an error indication, an error rate estimate, a state of a communications transaction between the first station and the second station, and an extent to which a previously received signal was decoded; and

decoding the received signal according to the identified code to produce an estimate of the first field.

B3 27. (Amended) A method of processing a signal representing information coded according to a code selected from a set of codes, the method comprising the steps of:

receiving the signal at a first station;

determining an extent to which to decode the received signal based on a communication between the first station and a second station that transmitted the signal that occurred prior to reception of the signal at the first station;

decoding the received signal according to respective codes of the set of codes to the determined extent to generate respective likelihood metrics associated with respective codes of the set of codes;

selecting a code from the set of codes based on the respective likelihood metrics; and

decoding the received signal according to the selected code to generate an estimate of the information,

wherein said step of determining an extent to which to decode the received signal is preceded by the steps of:

receiving a first signal; and

decoding the received first signal according to respective codes of the set of codes to a first extent to generate respective first likelihood metrics associated with respective codes of the set of codes;

wherein said step of receiving a signal comprises the step of receiving a second signal; and

wherein said step of determining an extent to which to decode the received signal comprises the step of determining an second extent to which to decode the received second signal based on the first extent to which the received first signal was decoded.

41. (Amended) A wireless station for processing a signal representing a first field and a second field, the first field coded according to a code selected from a set of codes and the second field indicating the code applied to the first field, the wireless station comprising:

a code selector circuit that processes the signal to generate an estimate of the second field, and that is operative, responsive to a confidence in the generated estimate of the second field, to select the code applied to the first field based solely on the generated estimate of the second field or to select the code applied to the first field

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based on the generated estimate of the second field and respective likelihood metrics associated with decoding the received signal according to respective codes of the set of codes, wherein said code selector circuit is operative to decode the received signal according to respective codes of the set of codes and to generate respective likelihood metrics for the respective decodings of the received signal according to the respective codes of the set of codes, wherein said code selector circuit is operative to decode the signal according to respective codes of the set of codes to an extent that is determined based on a confidence in the generated estimate of the second field, wherein said code selector circuit is operative to decode the signal according to respective codes of the set of codes to an extent that is determined based on prior communication between the wireless station and a station that transmitted the signal, and wherein said code selector circuit is operative to decode the signal according to respective codes of the set of codes to an extent that is determined based on at least one of a measure of channel quality, a communications status report transmitted between the wireless station and the station that transmitted the signal, an error indication, an error rate estimate, a state of a communications transaction between the wireless station and the station that transmitted the signal, and an extent to which a previously received signal was decoded; and

a variable decoder, responsive to said code selector circuit, that decodes the signal according to the selected code to produce an estimate of the first field

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44. (Amended) A wireless station according to Claim 47, wherein a respective code of the set of codes comprises a respective combination of a modulation code and a channel code.

47. (Amended) A wireless station for processing a signal representing information coded according to a code selected from a set of codes, the wireless station comprising:

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a receiver that receives the signal, that determines an extent to which to decode the received signal based on a communication between the wireless station and a station that transmitted the signal that occurred prior to reception of the signal,

that decodes the received signal according to respective codes of the set of codes to the determined extent to generate respective likelihood metrics associated with respective codes of the set of codes, that selects a code from the set of codes based on the respective likelihood metrics, and that decodes the received signal according to the selected code to generate an estimate of the information, wherein said receiver comprises:

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a code selector circuit that determines an extent to which to decode the received signal based on a prior communication between the wireless station and the station that transmitted the signal, that decodes the received signal according to respective codes of the set of codes to the determined extent to generate respective likelihood metrics associated with respective codes of the set of codes, and that selects a code from the set of codes based on the respective likelihood metrics, wherein said code selector circuit is operative to determine the extent to which to decode the received signal based on at least one of a measure of channel quality, a communications status report transmitted between the wireless station and the station that transmitted the signal, an error indication, an error rate estimate, a state of a communications transaction between the wireless station and the station that transmitted the signal, and an extent to which a previously received signal was decoded; and
a variable decoder, responsive to said code selector circuit, that decodes the received signal according to the selected code to generate an estimate of the information.

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50. (Amended) A wireless station according to Claim 47, wherein the signal represents a first field and a second field, wherein the first field is coded according to a code selected from a set of codes and the second field indicates the code applied to the first field, and wherein said code selector circuit is operative to process the received signal to generate an estimate of the second field and to determining the extent to which to decode the received signal based on a confidence in the generated estimate of the second field.

61. (Amended) A wireless station for processing a signal representing a first field and a second field, wherein the first field is coded according to a code selected from a set of codes and the second field indicates the code applied to the first field, the wireless station comprising:

means for receiving the signal;

means for processing the received signal to generate an estimate of the second field;

means, responsive to a confidence in the generated estimate of the second field, for identifying the code applied to the first field based solely on the generated estimate of the second field or for identifying the code applied to the first field based on the generated estimate of the second field and respective likelihood metrics associated with decoding the received signal according to respective codes of the set of codes, wherein said means for identifying the code applied to the first field based solely on the generated estimate of the second field or for identifying the code applied to the first field based on the generated estimate of the second field and respective likelihood metrics associated with decoding the received signal according to respective codes of the set of codes comprises means for biasing a selection of a code from the set of codes based on prior communication between the wireless station and the station that transmitted the signal, and wherein said means for biasing a selection of a code from the set of codes comprises means for biasing the selection of a code from the set of codes based on at least one of a measure of channel quality, a communications status report transmitted between the wireless station and the station that transmitted the signal, an error indication, an error rate estimate, a state of a communications transaction between the wireless station and the station that transmitted the signal, and an extent to which a previously received signal was decoded; and

means for decoding the received signal according to the identified code to produce an estimate of the first field.
